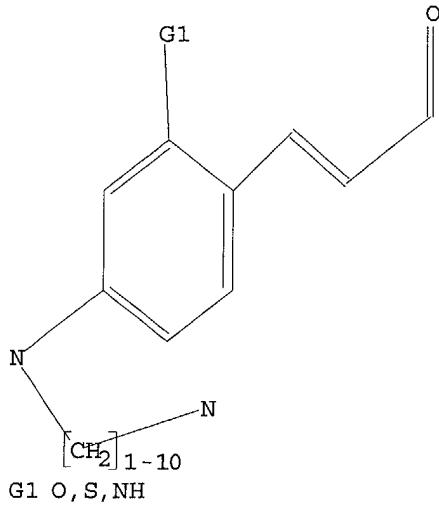


L1 STRUCTURE UPLOADED

=> d l1  
L1 HAS NO ANSWERS  
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss sam  
SAMPLE SEARCH INITIATED 09:58:25 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 17 TO ITERATE

100.0% PROCESSED 17 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 93 TO 587  
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 sss full  
FULL SEARCH INITIATED 09:58:31 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 322 TO ITERATE

100.0% PROCESSED 322 ITERATIONS 13 ANSWERS  
SEARCH TIME: 00.00.02

L3 13 SEA SSS FUL L1

=> S 13

L4 5 L3

=> DUP REM L4

PROCESSING COMPLETED FOR L4

L5 5 DUP REM L4 (0 DUPLICATES REMOVED)

=> D 14 1-5 ibib abs hitstr

L4 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 2002:813875 CAPLUS  
DOCUMENT NUMBER: 137:329436  
TITLE: Prodrugs via acylation with cinnamate  
INVENTOR(S): Gilbert, Carl W.; McGowan, Eleanor B.; Black, Kirby S.; Harper, Gregory T. P.  
PATENT ASSIGNEE(S): Cryolife, Inc., USA  
SOURCE: PCT Int. Appl., 60 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE       |
|---|------|----------|-----------------|------------|
| WO 2002083067   | A2   | 20021024 | WO 2002-US11330 | 20020412   |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM |      |          |                 |            |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                 |            |
| US 2002187992   | A1   | 20021212 | US 2002-66306   | 20020131   |
| PRIORITY APPLN. INFO.:  |      |          | US 2001-284304P | P 20010417 |
|   |      |          | US 2001-315782P | P 20010828 |
|   |      |          | US 2002-66306   | A 20020131 |

AB A prodrug compn. contg. a cinnamate moiety and a biol. active mol. moiety which can be released by hydrolysis or activated by light is disclosed. The cinnamate moiety can have substituents of various electronically donating or electronically withdrawing groups to modify the cinnamate moiety's elec. properties as well as photo reactivities for the purpose of achieving a proper hydrolysis rate of the acyl bond between the biol. active mol. moiety and the cinnamic acid backbone. The biol. active mol. can be any biol. active agent or diagnostic, for example, a chemotherapeutic such as a paclitaxel, camptothecin, doxorubicin, amethopterin, etoposide, or fluconazole. The prodrug compn. can be modified to add a carrier moiety on the prodrug compn. for targeting or to facilitate uptake of the drug. The prodrug compns. can be activated with an energy source to release the drug at the desired site. Representative energy sources can be in the form of elec. force, ultrasound, light or radiation of a radioactive material which can be administered either externally or internally.

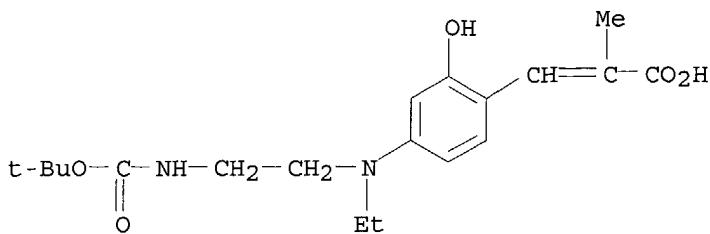
IT 473440-37-8

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of prodrugs via acylation with cinnamate for drug release by hydrolysis or activation by energy source)

RN 473440-37-8 CAPLUS

CN 2-Propenoic acid, 3-[4-[[2-[(1,1-dimethylethoxy)carbonyl]amino]ethyl]ethylamino]-2-hydroxyphenyl]-2-methyl- (9CI) (CA INDEX NAME)



IT 473440-38-9P 473440-39-0P 473440-43-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of prodrugs via acylation with cinnamate for drug release by hydrolysis or activation by energy source)

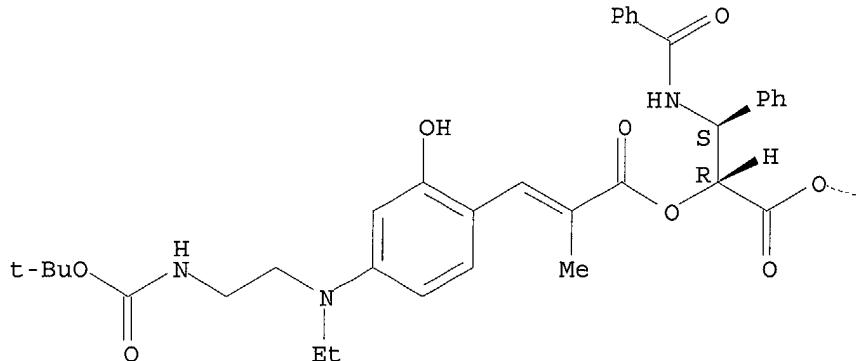
RN 473440-38-9 CAPLUS

CN Benzenepropanoic acid, .beta.- (benzoylamino) - .alpha.- [[3- [4- [[2- [[(1,1-dimethylethoxy) carbonyl] amino] ethyl] ethylamino] -2-hydroxyphenyl] -2-methyl-1-oxo-2-propenyl] oxy] -, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis (acetoxy)-12- (benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

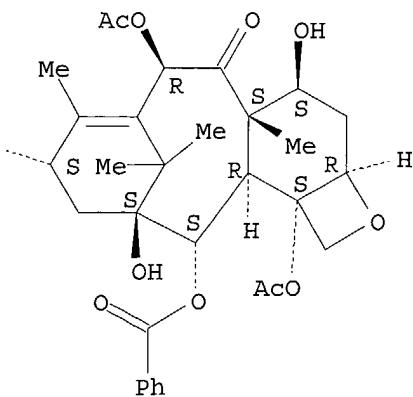
Absolute stereochemistry.

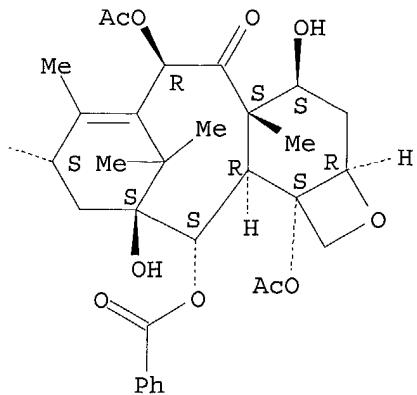
Double bond geometry unknown.

PAGE 1-A



PAGE 1-B



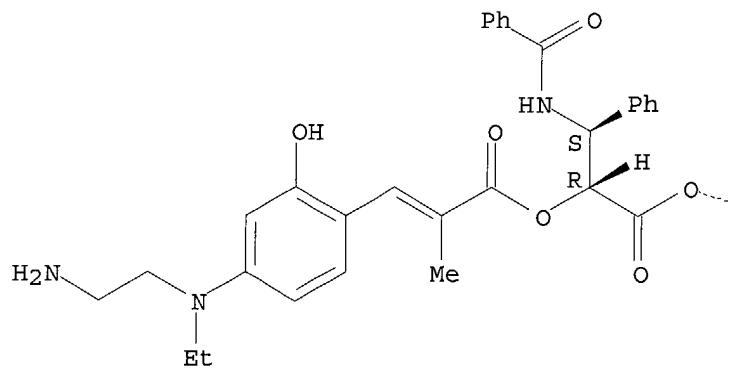


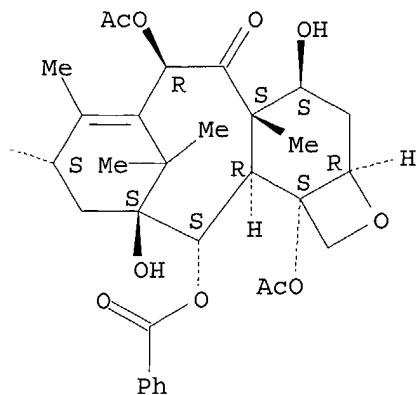
RN 473440-39-0 CAPLUS

CN Benzene propanoic acid, .alpha.-[[3-[4-[(2-aminoethyl)ethylamino]-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]-.beta.- (benzoylamino)-, (2aR,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

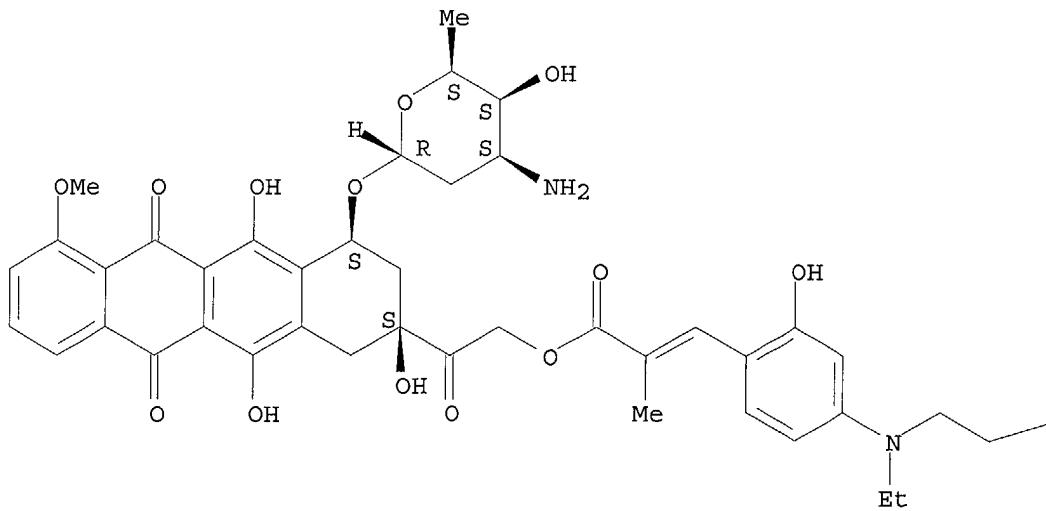


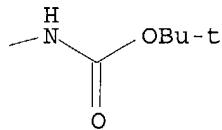


RN 473440-43-6 CAPLUS

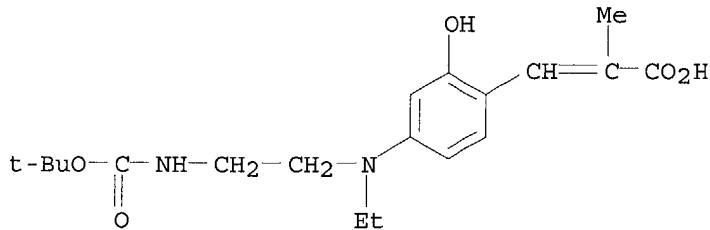
CN 2-Propenoic acid, 3-[4-[[2-[(1,1-dimethylethoxy)carbonyl]amino]ethyl]ethylamino]-2-hydroxyphenyl]-2-methyl-, 2-[(2S,4S)-4-[(3-amino-2,3,6-trideoxy-.alpha.-L-lyxo-hexopyranosyl)oxy]-1,2,3,4,6,11-hexahydro-2,5,12-trihydroxy-7-methoxy-6,11-dioxo-2-naphthacenyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry unknown.



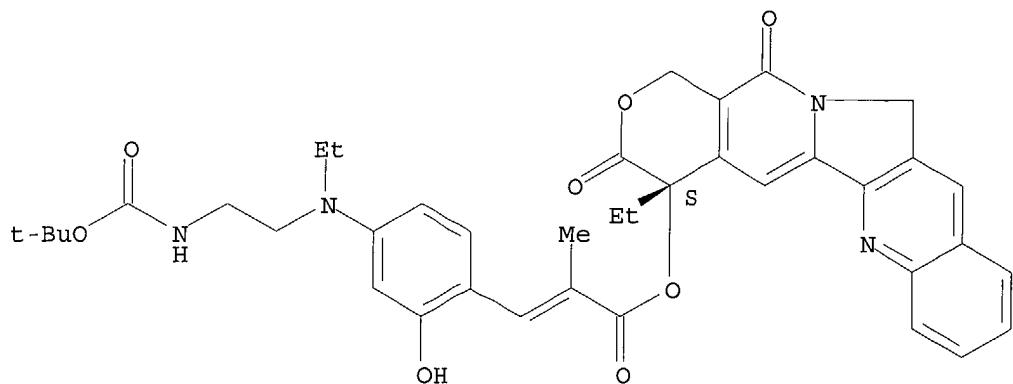


IT 473440-37-8DP, conjugates with polyethylene glycol and cytokine  
**473440-41-4P 473440-44-7P**  
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of prodrugs via acylation with cinnamate for drug release by hydrolysis or activation by energy source)  
 RN 473440-37-8 CAPLUS  
 CN 2-Propenoic acid, 3-[4-[[2-[(1,1-dimethylethoxy)carbonyl]amino]ethyl]ethylamino]-2-hydroxyphenyl]-2-methyl- (9CI) (CA INDEX NAME)



RN 473440-41-4 CAPLUS  
 CN 2-Propenoic acid, 3-[4-[[2-[(1,1-dimethylethoxy)carbonyl]amino]ethyl]ethylamino]-2-hydroxyphenyl]-2-methyl-, (4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-4-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry unknown.

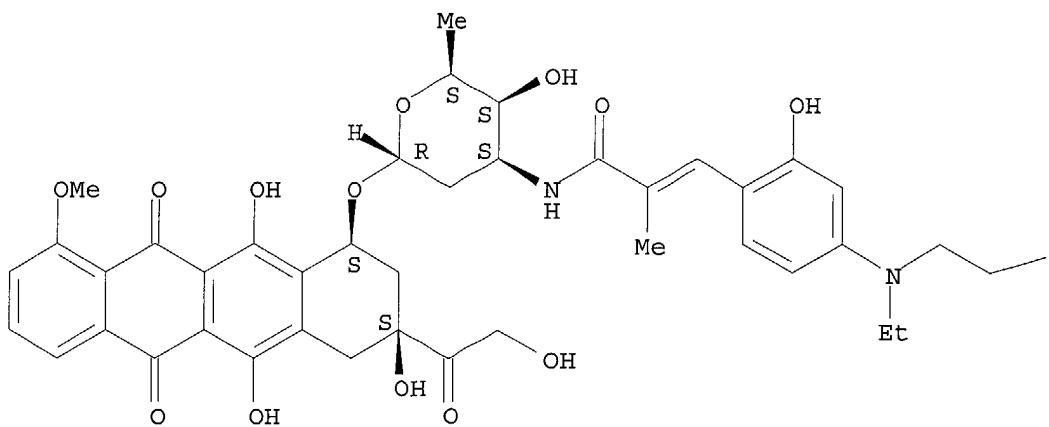


RN 473440-44-7 CAPLUS

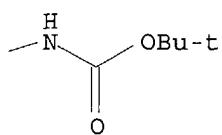
CN 5,12-Naphthacenedione, 7,8,9,10-tetrahydro-6,8,11-trihydroxy-8-  
(hydroxyacetyl)-1-methoxy-10-[[2,3,6-trideoxy-3-[[3-[4-[[2-[(1,1-  
dimethylethoxy)carbonyl]amino]ethyl]ethylamino]-2-hydroxyphenyl]-2-methyl-  
1-oxo-2-propenyl]amino]-.alpha.-L-lyxo-hexopyranosyl]oxy]-, (8S,10S)-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry unknown.

PAGE 1-A



PAGE 1-B



IT 473440-33-4 473440-34-5D, conjugates with monoclonal

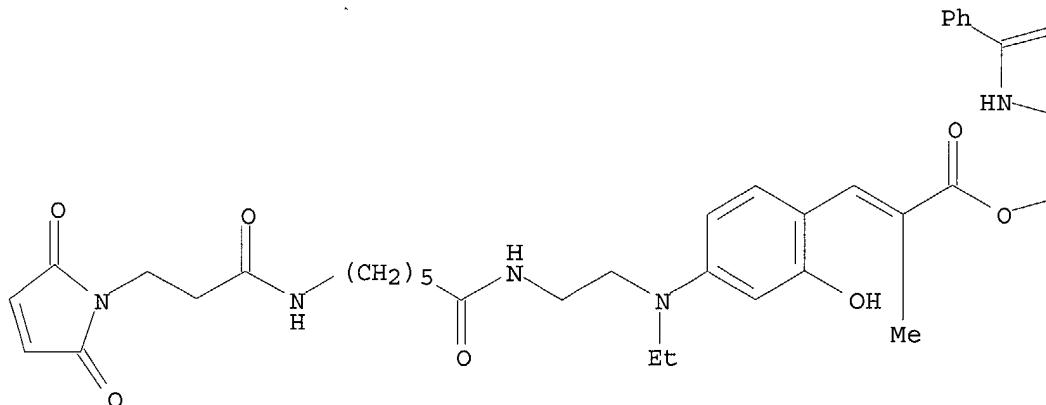
antibodies 473440-35-6 473440-35-6D, conjugates with monoclonal antibodies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (prepn. of prodrugs via acylation with cinnamate for drug release by hydrolysis or activation by energy source)

RN 473440-33-4 CAPLUS

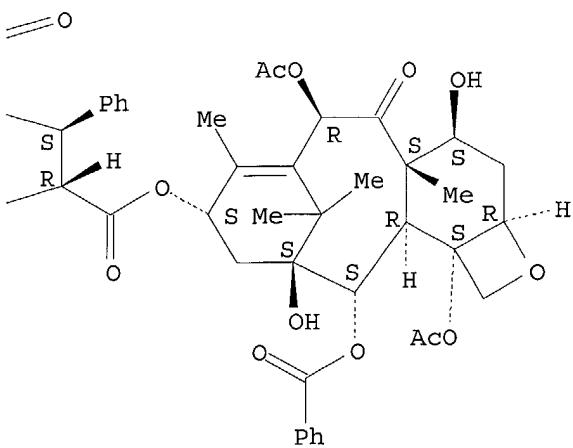
CN Benzene propanoic acid, .beta.- (benzoylamino) - .alpha. - [ [3- [4- [ [2- [ [6- [ [3- (2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl) -1-oxopropyl] amino] -1- oxohexyl] amino] ethyl] ethylamino] -2-hydroxyphenyl] -2-methyl-1-oxo-2- propenyl] oxy] - , (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS) -6,12b-bis (acetyloxy) -12- (benzoyloxy) -2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11- dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H- cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry unknown.

PAGE 1-A



PAGE 1-B



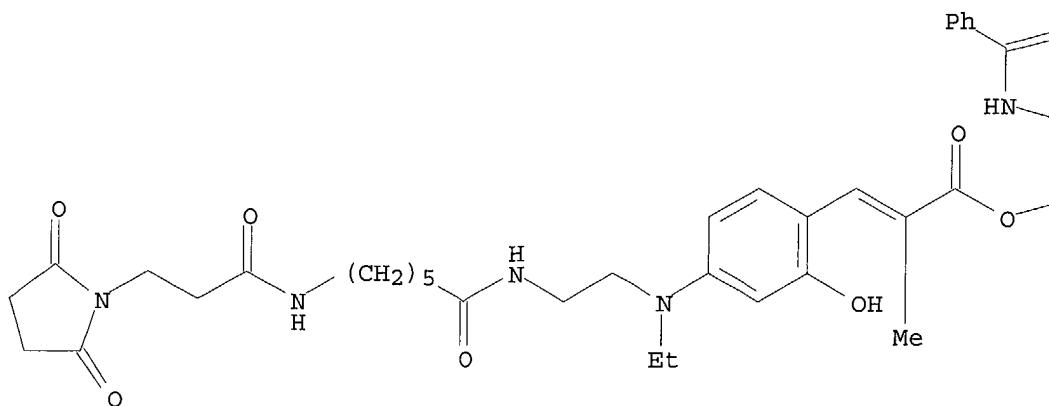
RN 473440-34-5 CAPLUS

CN Benzene propanoic acid, .beta.- (benzoylamino) - .alpha. - [ [3- [4- [ [2- [ [6- [ [3- (2,5-dioxo-1-pyrrolidinyl) -1-oxopropyl] amino] -1- oxohexyl] amino] ethyl] ethylamino] -2-hydroxyphenyl] -2-methyl-1-oxo-2- propenyl] oxy] - , (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS) -6,12b-bis (acetyloxy) -12- (benzoyloxy) -2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-

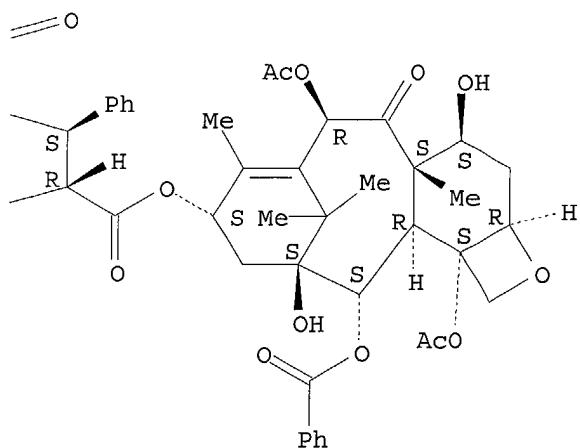
dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry unknown.

PAGE 1-A



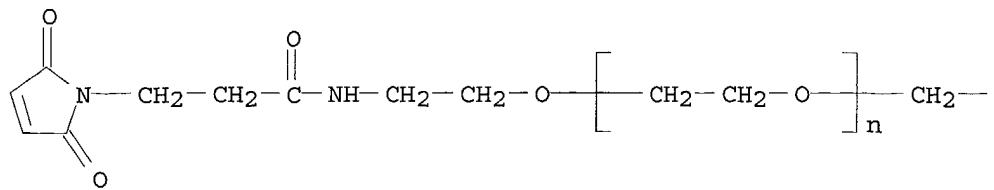
PAGE 1-B



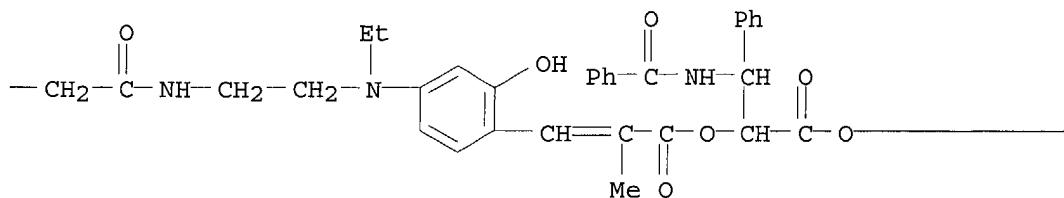
RN 473440-35-6 CAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[3-[[2-[[4-[[3-[(1R,2S)-1-[[[(2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl]oxy]carbonyl]-2-(benzoylamino)-2-phenylethoxy]-2-methyl-1-oxo-1-propenyl]-3-hydroxyphenyl]ethylamino]ethyl]amino]-3-oxopropyl]-.omega.-[2-[[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxopropyl]amino]ethoxy]- (9CI) (CA INDEX NAME)

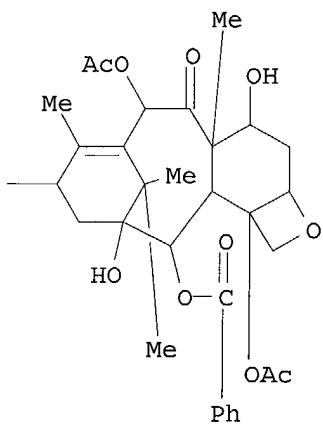
PAGE 1-A



PAGE 1-B

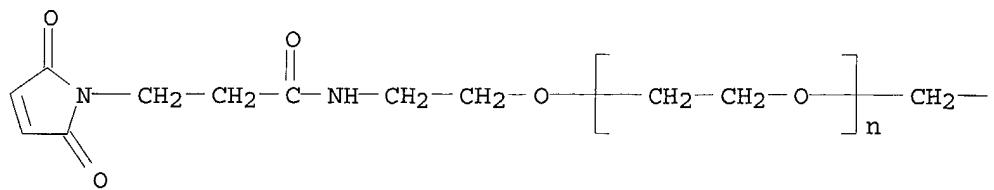


PAGE 1-C

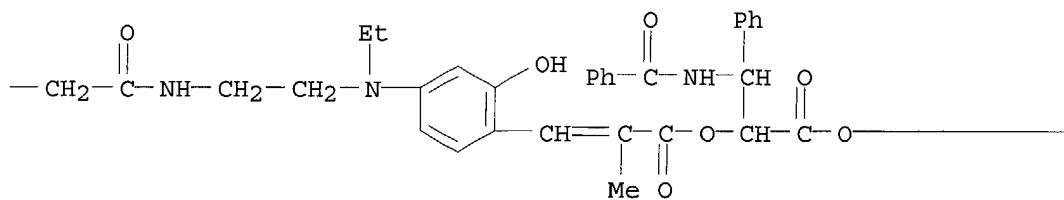


RN 473440-35-6 CAPLUS  
CN Poly(oxy-1,2-ethanediyl), .alpha.-[3-[[2-[[4-[3-[(1R,2S)-1-  
[[[(2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-  
(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-  
4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-  
9-yl]oxy]carbonyl]-2-(benzoylamino)-2-phenylethoxy]-2-methyl-1-oxo-1-  
propenyl]-3-hydroxyphenyl]ethylamino]ethyl]amino]-3-oxopropyl]-.omega.-[2-  
[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxopropyl]amino]ethoxy]-  
(9CI) (CA INDEX NAME)

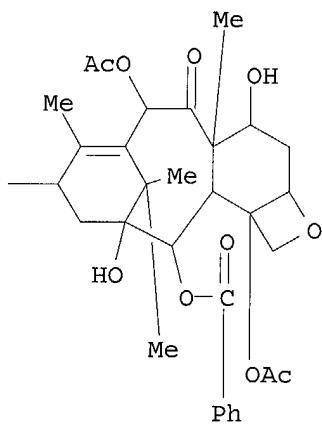
PAGE 1-A



PAGE 1-B



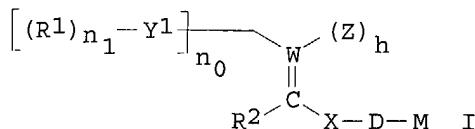
PAGE 1 - C



L4 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1993:244465 CAPLUS  
DOCUMENT NUMBER: 118:244465  
TITLE: Silver halide photographic light-sensitive material  
INVENTOR(S): Matushita, Tetunori  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Eur. Pat. Appl., 74 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO. | KIND | DATE     | APPLICATION NO. | DATE     |
|------------|------|----------|-----------------|----------|
| EP 508432  | A1   | 19921014 | EP 1992-106180  | 19920409 |
| EP 508432  | B1   | 19980325 |                 |          |

R: DE, FR, GB, NL  
 JP 04311952 A2 19921104 JP 1991-103584 19910410  
 US 5266453 A 19931130 US 1992-866517 19920410  
 PRIORITY APPLN. INFO.: JP 1991-103584 19910410  
 OTHER SOURCE(S): MARPAT 118:244465  
 GI



AB Photog. material with improved safelight property contains in .gtoreq.1 hydrophilic colloidal layer .gtoreq.1 filter dye which is irreversibly bleached during processing step. The filter dye comprises I (R1,R2 = H, or a substitutable) group; n0, n1, n2 = 0-1; h = 1-2; R1,R2,R3 = may together form a hydrocarbon or heterocyclic ring; Y1 = CO, CO(NR4), CS, C(N+R5R6), SO, SO2, C(CR7R8), R6CN, or C6CCR9 in [(R1)n1 Y1] when n1 = 1 and in Y1(R3)n2 when n2 = 1 in which R4-R9 = H or a substitutable group, Y1 = CN, NO2 in [(R1)n1 Y1] when n1 = 0 and in Y1(R3)n2 when n2 = 0; x - divalent linkage; D = photog. dye residue; M = amphoteric group.

IT 146844-68-0

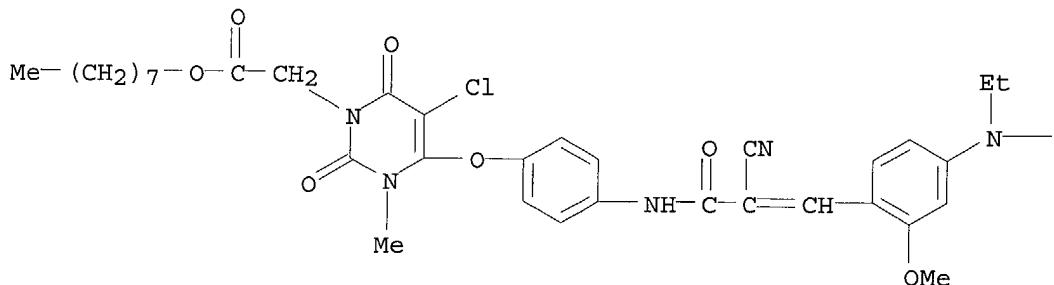
RL: USES (Uses)

(photog. material with improved safelight property contg. filter dye of)

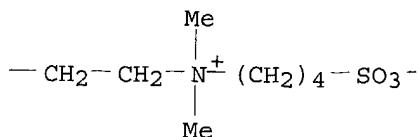
RN 146844-68-0 CAPLUS

CN 1-Butanaminium, N-[2-[[4-[[3-[[4-[[5-chloro-1,2,3,6-tetrahydro-3-methyl-1-[2-(octyloxy)-2-oxoethyl]-2,6-dioxo-4-pyrimidinyl]oxy]phenyl]amino]-2-cyano-3-oxo-1-propenyl]-3-methoxyphenyl]ethylamino]ethyl]-N,N-dimethyl-4-sulfo-, inner salt (9CI) (CA INDEX NAME)

PAGE 1-A

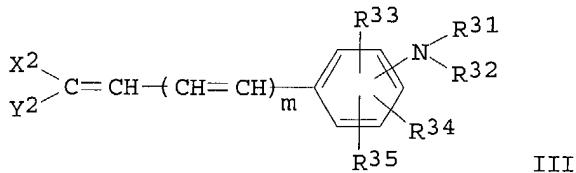
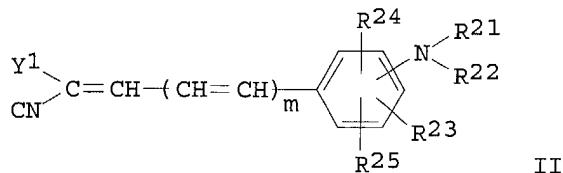
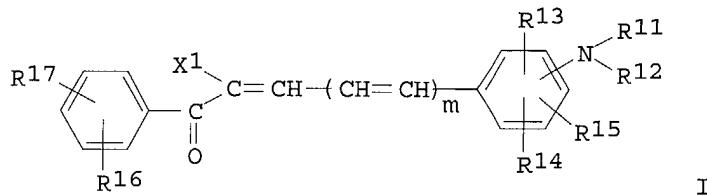


PAGE 1-B



ACCESSION NUMBER: 1993:29821 CAPLUS  
 DOCUMENT NUMBER: 118:29821  
 TITLE: Photographic material containing quick bleachable dyes  
 INVENTOR(S): Kawashima, Yasuhiko; Yamauchi, Reiko; Kagawa, Nobuaki  
 PATENT ASSIGNEE(S): Konica Co., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 37 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE     |
|------------------------|------|----------|-----------------|----------|
| JP 04116639            | A2   | 19920417 | JP 1990-237765  | 19900907 |
| PRIORITY APPLN. INFO.: |      |          | JP 1990-237765  | 19900907 |
| GI                     |      |          |                 |          |

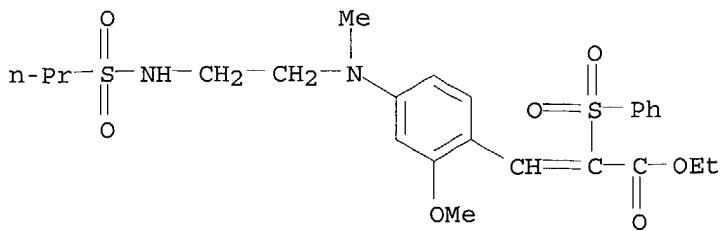


AB The title photog. material contains a dispersed fine solid powder of a compd. selected from I, II and III [R1,2 = H, (cyclo)alkyl, alkenyl, aryl, heterocyclyl, acyl, sulfonyl; R1 and R2 may form a 5- or 6-membered ring; R3-5 = H, halo, alkyl, CO2H, alkoxy carbonyl, aryloxy carbonyl, amino, carbamoyl, sulfamoyl, NO2, CN, OH, alkoxy, SH, aryl, alkenyl; X1 = COR8, CONR8R9, CO2R8, SO2R8, SOR8, SO2NR8R9; R8,9 = H, (cyclo)alkyl, aryl, heterocyclyl, alkenyl; m = 0-2; Y1 = CN, CONR8R9, CO2R8, SO2R8, SOR8, SO2NR8R9; X2, Y2 = COR8R9, CO2R8, SO2R8, SOR8, SO2NR8R9].

IT 144807-25-0  
 RL: USES (Uses)  
 (bleachable dye, photog. material contg.)

RN 144807-25-0 CAPLUS

CN 2-Propenoic acid, 3-[2-methoxy-4-[methyl[2-[(propylsulfonyl)amino]ethyl]amino]phenyl]-2-(phenylsulfonyl)-, ethyl ester (9CI) (CA INDEX NAME)



L4 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1991:682120 CAPLUS

DOCUMENT NUMBER: 115:282120

TITLE: Yellow colorants for sublimation thermal-transfer printing

INVENTOR(S): Chiba, Junji; Kato, Hiroyuki

PATENT ASSIGNEE(S): Sankyo Kagaku K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE     |
|------------------------|------|----------|-----------------|----------|
| JP 02292371            | A2   | 19901203 | JP 1989-112005  | 19890502 |
| PRIORITY APPLN. INFO.: |      |          | JP 1989-112005  | 19890502 |

GI For diagram(s), see printed CA Issue.

AB The title colorants I [R1-2 = H, (un)substituted alkyl, cycloalkyl, aralkyl, aryl; R1-2 may be bonded with X to form 5- or 6-membered ring; R3-4 = H, halo, cyano, (un)substituted alkyl, cycloalkyl, alkoxy, aryl, aralkyl, acylamino, sulfonylamino, ureido, carbamoyl, sulfamoyl, acyl, amino; A1-2 = electron-withdrawing group; one of A1-2 may be aryl; Z = CH, N; Y = divalent group; X = H or group to from 5- or 6-membered ring with R1-2; m, n = 1, 2] are prep'd. Thus, condensation of PhNHBu and Br(CH<sub>2</sub>)<sub>5</sub>Br in presence of Na<sub>2</sub>CO<sub>3</sub> and Vilsmeier formylation of the product gave N,N'-di-n-butyl-N,N'-bis(4-formylphenyl)-1,5-diaminopentane, which was then treated with CH<sub>2</sub>(CN)<sub>2</sub> to give 80% N,N'-di-n-butyl-N,N'-bis[4-(2,2-dicyanoethylene)phenyl]-1,5-diaminopentane (II). An ink contg. II 4, ethyl Cellosolve 8, MEK 44, and PhMe 44 parts was applied on a capacitor tissue paper and dried to obtain a thermal-transfer material, which gave high-d. image with bright yellow color.

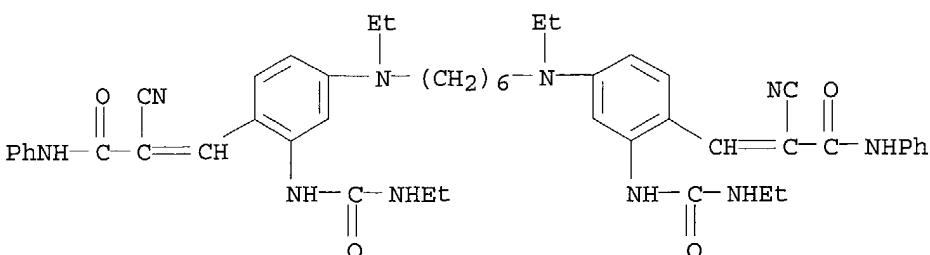
IT 136029-48-6P

RL: PREP (Preparation)

(prepn. of, yellow dye, for sublimation thermal-transfer printing)

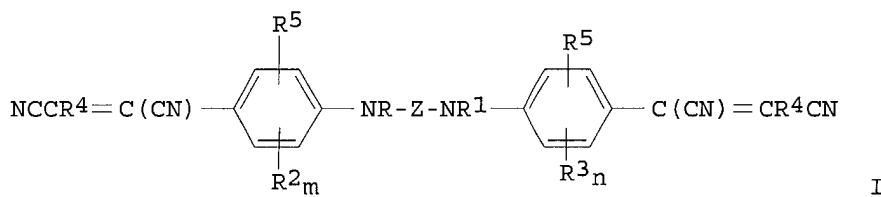
RN 136029-48-6 CAPLUS

CN 2-Propenamide, 3,3'-[1,6-hexanediylibis[(ethylimino)[2-[(ethylamino)carbonyl]amino]-4,1-phenylene]]bis[2-cyano-N-phenyl- (9CI) (CA INDEX NAME)



L4 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1991:618966 CAPLUS  
 DOCUMENT NUMBER: 115:218966  
 TITLE: Biscyanostyrene dyes for thermal-transfer recording  
 INVENTOR(S): Chiba, Junji; Kato, Hiroyuki  
 PATENT ASSIGNEE(S): Sankyo Chemical Industries, Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE     |
|------------------------|------|----------|-----------------|----------|
| JP 03086591            | A2   | 19910411 | JP 1989-223015  | 19890831 |
| PRIORITY APPLN. INFO.: |      |          | JP 1989-223015  | 19890831 |
| GI                     |      |          |                 |          |



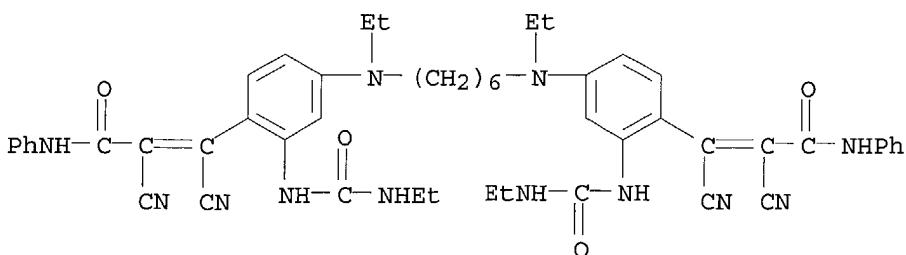
AB A dye for thermal-transfer recording has formula I [R, R1 = H, (substituted) alkyl, cycloalkyl, aralkyl, aryl, they may form a 5- or 6-membered ring together with R5, resp.; R2, R3 = H, halo, CN, (substituted) alkyl, cycloalkyl, alkoxy, aryl, aralkyl, acylamino, sulfonylamino, ureido, carbamoyl, sulfamoyl, acyl, amino; R4 = electron-attracting group; R5 = H, atom(s) required to form a 5-or 6-membered ring together with R or R1; Z = divalent group; m, n = 1, 2]. A thermal-transfer sheet using I (R = R1 = Bu, R2 = R3 = R5 = H, R4 = CN, Z = (CH2)5) gave clear, high d. magenta images.

IT 136967-50-5

RL: USES (Uses)  
(thermal-transfer recording material using)

RN 136967-50-5 CAPLUS

CN 2-Propenamide, 3,3'-[1,6-hexanediylibis[(ethylimino)[2-[(ethylamino)carbonyl]amino]-4,1-phenylene]]bis[2,3-dicyano-N-phenyl-(9CI) (CA INDEX NAME)



=> d his

(FILE 'HOME' ENTERED AT 09:57:37 ON 02 DEC 2003)

FILE 'REGISTRY' ENTERED AT 09:57:47 ON 02 DEC 2003

L1 STRUCTURE uploaded

L2 0 S L1 SSS SAM

L3 13 S L1 SSS FULL

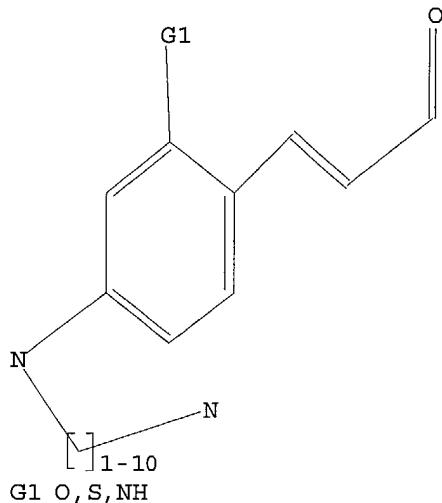
FILE 'CAPLUS, MEDLINE' ENTERED AT 10:01:00 ON 02 DEC 2003

L4 5 S L3

L5 5 DUP REM L4 (0 DUPLICATES REMOVED)

L6 STRUCTURE UPLOADED

=> d 16  
L6 HAS NO ANSWERS  
L6 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 16 sss sam  
SAMPLE SEARCH INITIATED 10:16:39 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 22 TO ITERATE  
  
100.0% PROCESSED 22 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01  
  
FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 159 TO 721  
PROJECTED ANSWERS: 0 TO 0

L7 0 SEA SSS SAM L6

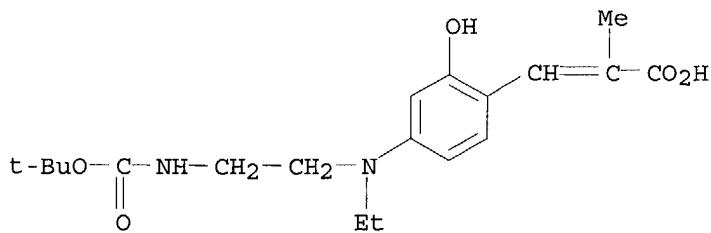
=> s 16 sss full  
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FULL SCREEN SEARCH COMPLETED - 487 TO ITERATE

100.0% PROCESSED 487 ITERATIONS 13 ANSWERS  
SEARCH TIME: 00.00.01

L8 13 SEA SSS FUL L6

=> d scan

L8 13 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN  
IN 2-Propenoic acid, 3-[4-[[2-[(1,1-dimethylethoxy)carbonyl]amino]ethyl]ethylamino]-2-hydroxyphenyl]-2-methyl- (9CI)  
MF C19 H28 N2 O5



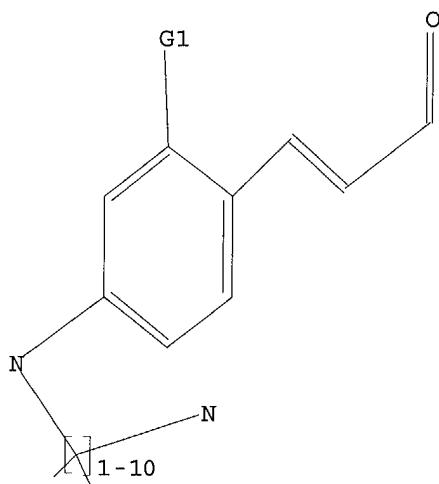
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

=>  
Uploading 306-cinnamate-11.str

L9 STRUCTURE UPLOADED

=> d 19  
L9 HAS NO ANSWERS  
L9 STR



G1 O, S, NH

Structure attributes must be viewed using STN Express query preparation.

=> s 19 sss sam  
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SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 0 TO 0  
PROJECTED ANSWERS: 0 TO 0

L10 0 SEA SSS SAM L9

=> s l9 sss full  
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FULL SCREEN SEARCH COMPLETED - 0 TO ITERATE  
  
100.0% PROCESSED 0 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01  
  
L11 0 SEA SSS FUL L9

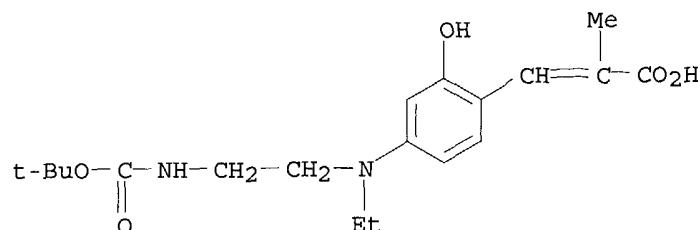
L12 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 2002:813875 CAPLUS  
DOCUMENT NUMBER: 137:329436  
TITLE: Prodrugs via acylation with cinnamate  
INVENTOR(S): Gilbert, Carl W.; McGowan, Eleanor B.; Black, Kirby  
S.; Harper, Gregory T. P.  
PATENT ASSIGNEE(S): Cryolife, Inc., USA  
SOURCE: PCT Int. Appl., 60 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

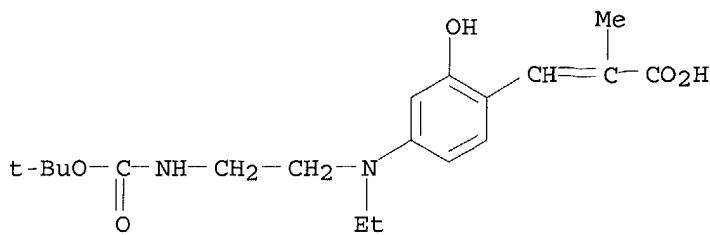
| PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE       |
|--|------|----------|-----------------|------------|
| WO 2002083067  | A2   | 20021024 | WO 2002-US11330 | 20020412   |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,<br>CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,<br>GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,<br>LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,<br>PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,<br>UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM |      |          |                 |            |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,<br>CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,<br>BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG   |      |          |                 |            |
| US 2002187992  | A1   | 20021212 | US 2002-66306   | 20020131   |
| PRIORITY APPLN. INFO.:   |      |          | US 2001-284304P | P 20010417 |
|  |      |          | US 2001-315782P | P 20010828 |
|  |      |          | US 2002-66306   | A 20020131 |

AB A prodrug compn. contg. a cinnamate moiety and a biol. active mol. moiety which can be released by hydrolysis or activated by light is disclosed. The cinnamate moiety can have substituents of various electronically donating or electronically withdrawing groups to modify the cinnamate moiety's elec. properties as well as photo reactivities for the purpose of achieving a proper hydrolysis rate of the acyl bond between the biol. active mol. moiety and the cinnamic acid backbone. The biol. active mol. can be any biol. active agent or diagnostic, for example, a chemotherapeutic such as a paclitaxel, camptothecin, doxorubicin, amethopterin, etoposide, or fluconazole. The prodrug compn. can be modified to add a carrier moiety on the prodrug compn. for targeting or to facilitate uptake of the drug. The prodrug compns. can be activated with an energy source to release the drug at the desired site. Representative energy sources can be in the form of elec. force, ultrasound, light or radiation of a radioactive material which can be administered either externally or internally.

IT 473440-37-8  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. of prodrugs via acylation with cinnamate for drug release by hydrolysis or activation by energy source)

RN 473440-37-8 CAPLUS  
CN 2-Propenoic acid, 3-[4-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]ethyl]ethyl]amino]-2-hydroxyphenyl]-2-methyl- (9CI) (CA INDEX NAME)





IT 473440-38-9P 473440-39-0P 473440-43-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of prodrugs via acylation with cinnamate for drug release by hydrolysis or activation by energy source)

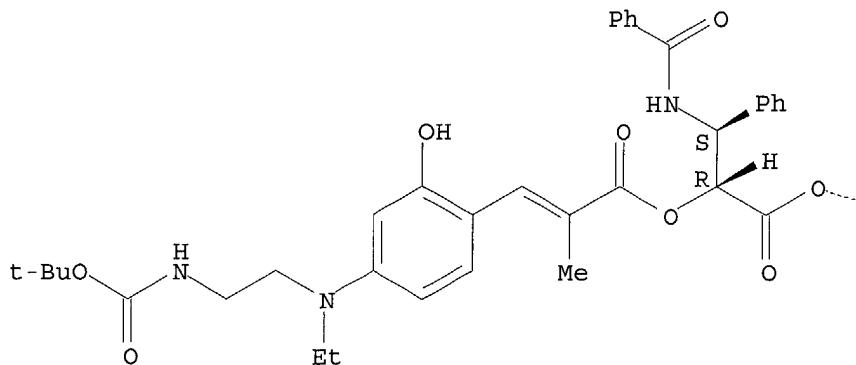
RN 473440-38-9 CAPLUS

CN Benzenepropanoic acid, .beta.- (benzoylamino) - .alpha.- [[3- [4- [[2- [(1,1-dimethylethoxy) carbonyl] amino] ethyl] ethylaminol -2-hydroxyphenyl] -2-methyl-1-oxo-2-propenyl] oxy] -, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetoxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

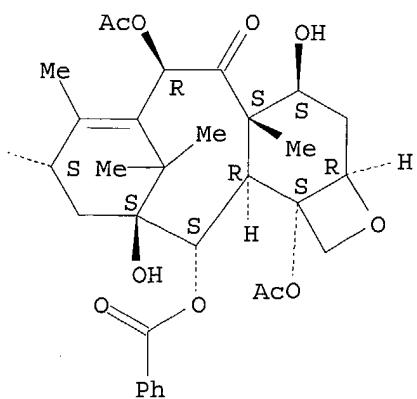
Absolute stereochemistry.

Double bond geometry unknown.

PAGE 1-A



PAGE 1-B



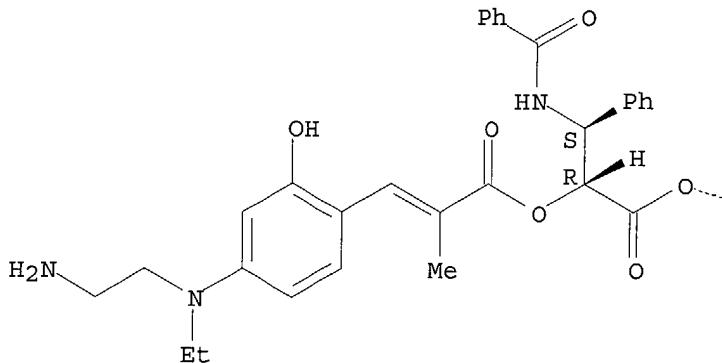
RN 473440-39-0 CAPLUS

CN Benzenepropanoic acid, .alpha.-[ [3- [4- [(2-aminoethyl)ethylamino]-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy]-.beta.- (benzoylamino)-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

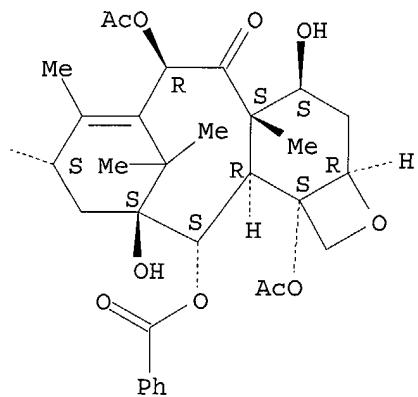
Absolute stereochemistry.

Double bond geometry unknown.

PAGE 1-A



PAGE 1-B

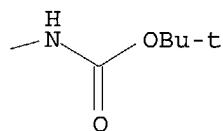
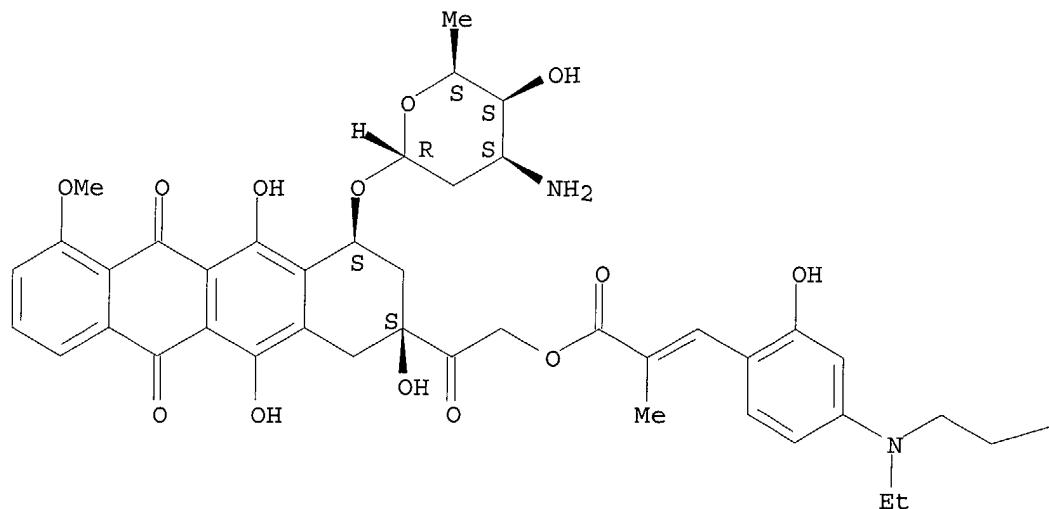


RN 473440-43-6 CAPLUS

CN 2-Propenoic acid, 3-[4-[[2-[(1,1-dimethylethoxy)carbonyl]amino]ethyl]ethoxy]-2-hydroxyphenyl]-2-methyl-, 2-[(2S,4S)-4-[(3-amino-2,3,6-trideoxy-.alpha.-L-lyxo-hexopyranosyl)oxy]-1,2,3,4,6,11-hexahydro-2,5,12-trihydroxy-7-methoxy-6,11-dioxo-2-naphthacenyl]-2-oxoethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

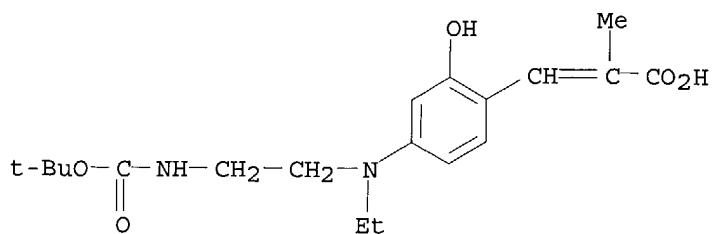


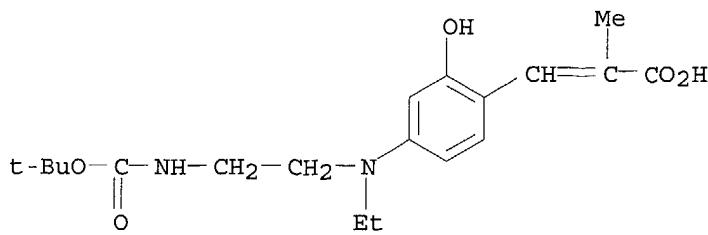
IT 473440-37-8DP, conjugates with polyethylene glycol and cytokine  
 473440-41-4P 473440-44-7P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of prodrugs via acylation with cinnamate for drug release by hydrolysis or activation by energy source)

RN 473440-37-8 CAPLUS

CN 2-Propenoic acid, 3-[4-[[2-[[[(1,1-dimethylethoxy)carbonyl]amino]ethyl]ethylamino]-2-hydroxyphenyl]-2-methyl- (9CI) (CA INDEX NAME)



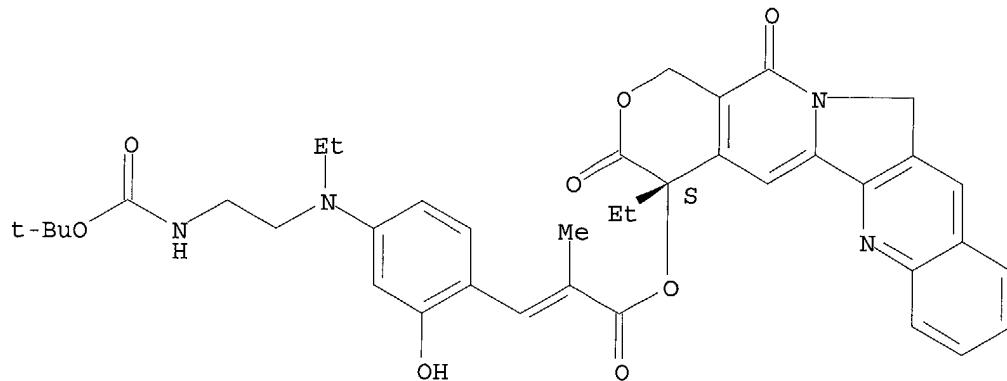


RN 473440-41-4 CAPLUS

CN 2-Propenoic acid, 3-[4-[[2-[(1,1-dimethylethoxy)carbonyl]amino]ethyl]ethylamino]-2-hydroxyphenyl]-2-methyl-, (4S)-4-ethyl-3,4,12,14-tetrahydro-3,14-dioxo-1H-pyran-3',4':6,7]indolizino[1,2-b]quinolin-4-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.



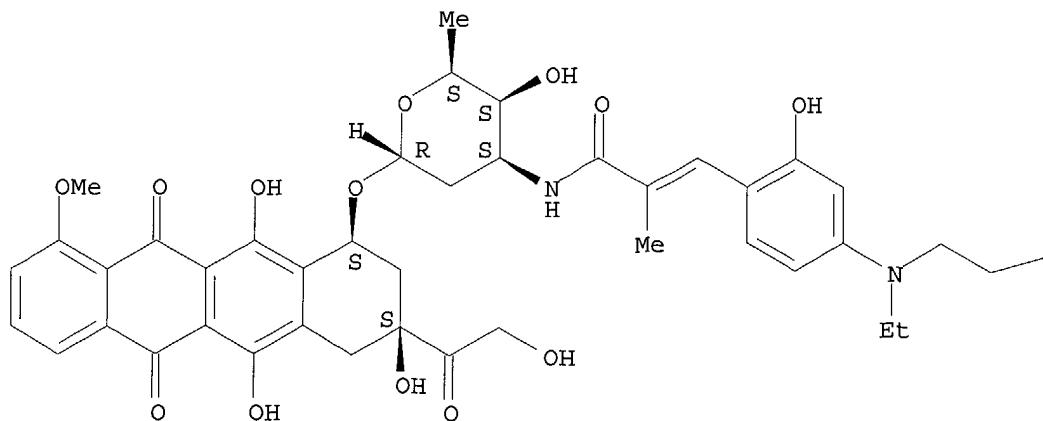
RN 473440-44-7 CAPLUS

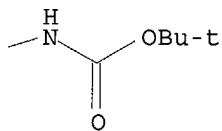
CN 5,12-Naphthacenedione, 7,8,9,10-tetrahydro-6,8,11-trihydroxy-8-(hydroxyacetyl)-1-methoxy-10-[[2,3,6-trideoxy-3-[[3-[4-[[2-[(1,1-dimethylethoxy)carbonyl]amino]ethyl]ethylamino]-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]amino]-.alpha.-L-lyxo-hexopyranosyl]oxy]-, (8S,10S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

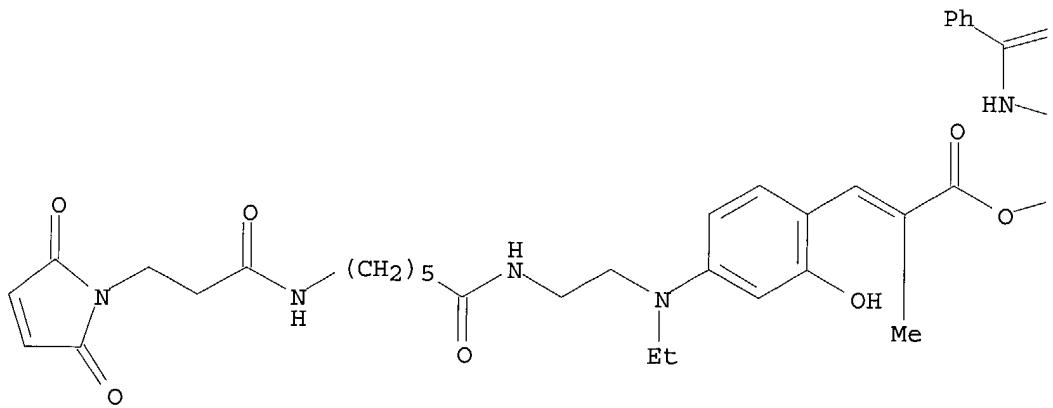
PAGE 1-A

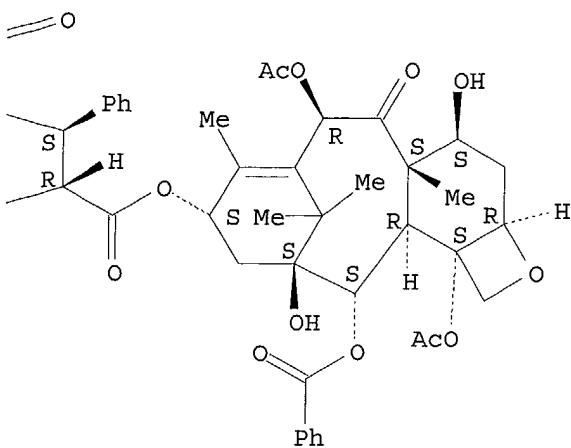




IT 473440-33-4 473440-34-5D, conjugates with monoclonal antibodies 473440-35-6 473440-35-6D, conjugates with monoclonal antibodies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (prepn. of prodrugs via acylation with cinnamate for drug release by hydrolysis or activation by energy source)  
 RN 473440-33-4 CAPLUS  
 CN Benzenepropanoic acid, .beta.- (benzoylamino) - .alpha. - [ [ 3 - [ 4 - [ [ 2 - [ [ 6 - [ [ 3 -  
 (2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl) - 1-oxopropyl] amino] - 1 -  
 oxohexyl] amino] ethyl] ethylamino] - 2-hydroxyphenyl] - 2-methyl-1-oxo-2-  
 propenyl] oxy] - , (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS) - 6,12b-bis (acetyloxy) -  
 12- (benzoyloxy) - 2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-  
 dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-  
 cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S) - (9CI) (CA  
 INDEX NAME)

Absolute stereochemistry.  
Double bond geometry unknown.

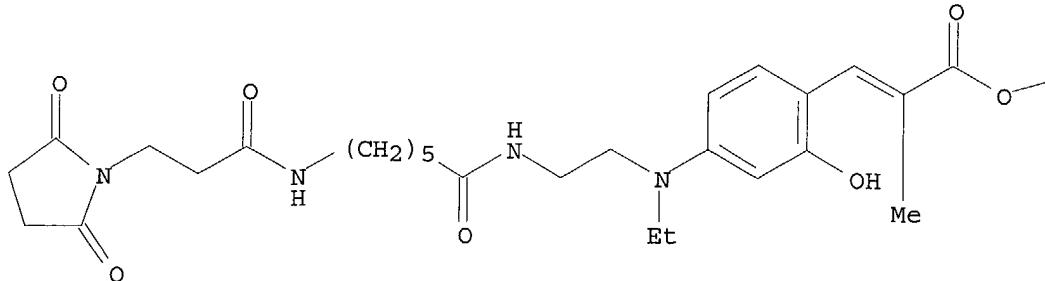
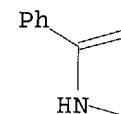


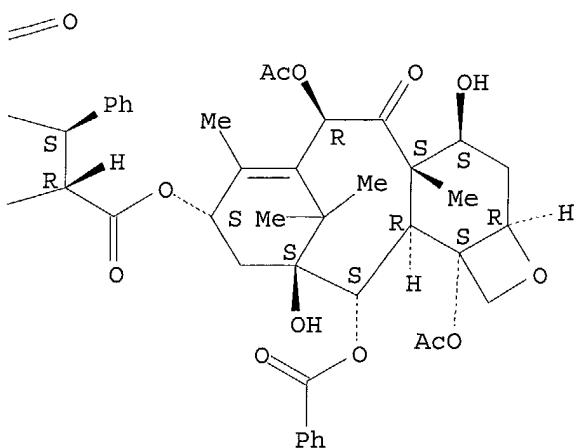


RN 473440-34-5 CAPLUS

CN Benzenepropanoic acid, .beta.- (benzoylamino) - .alpha.- [ [3- [4- [ [2- [ [6- [ [3- (2,5-dioxo-1-pyrrolidinyl)-1-oxopropyl]amino]-1-oxohexyl]amino]ethyl]ethylamino]-2-hydroxyphenyl]-2-methyl-1-oxo-2-propenyl]oxy] -, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis (acetyloxy) -12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S) - (9CI) (CA INDEX NAME)

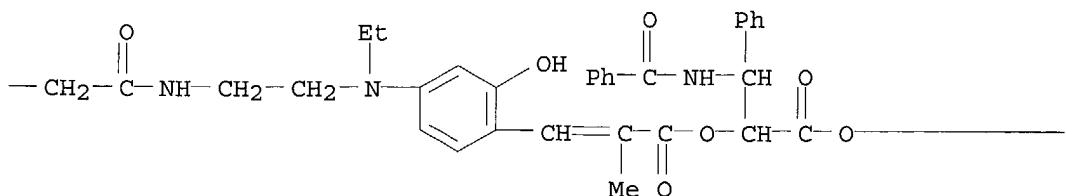
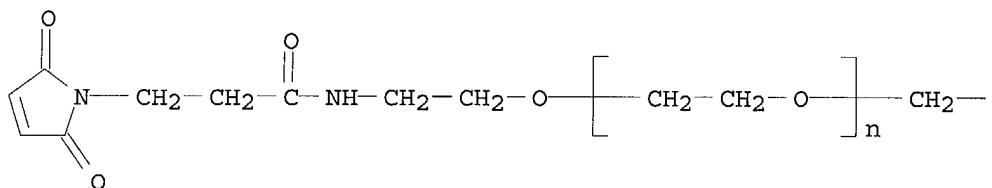
Absolute stereochemistry.  
Double bond geometry unknown.

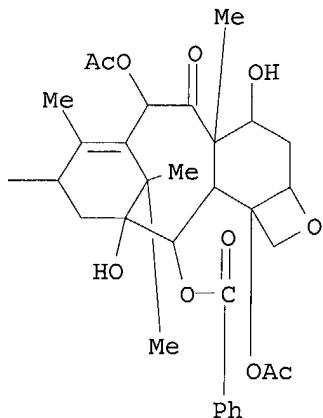




RN 473440-35-6 CAPLUS

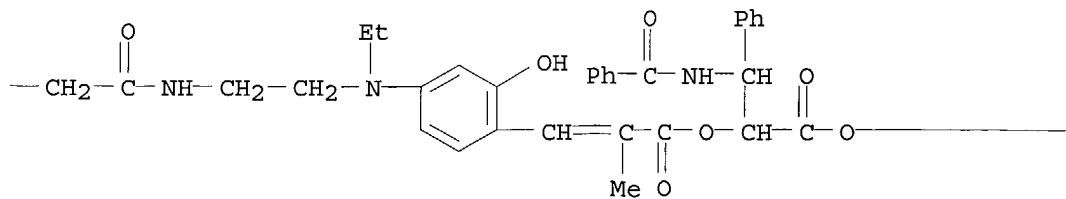
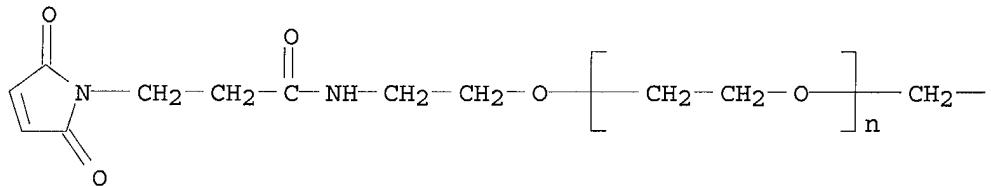
CN Poly(oxy-1,2-ethanediyl), .alpha.-[3-[[2-[[4-[[3-[(1R,2S)-1-[(2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl]oxy]carbonyl]-2-(benzoylamino)-2-phenylethoxy]-2-methyl-1-oxo-1-propenyl]-3-hydroxyphenyl]ethylamino]ethyl]amino]-3-oxopropyl]-.omega.-[2-[[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxopropyl]amino]ethoxy]-(9CI) (CA INDEX NAME)

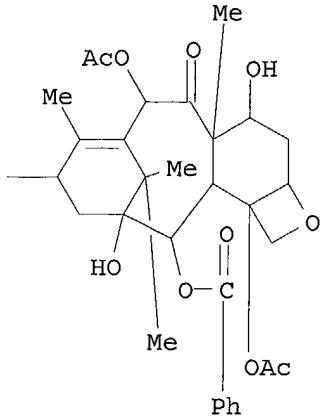




RN 473440-35-6 CAPLUS

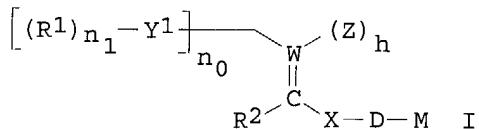
CN Poly(oxy-1,2-ethanediyl), .alpha.-[3-[[2-[[4-[[3-[(1R,2S)-1-[[[(2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl]oxy]carbonyl]-2-(benzoylamino)-2-phenylethoxy]-2-methyl-1-oxo-1-propenyl]-3-hydroxyphenyl]ethylamino]ethyl]amino]-3-oxopropyl]-.omega.-[2-[[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxopropyl]amino]ethoxy]-(9CI) (CA INDEX NAME)





L12 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1993:244465 CAPLUS  
 DOCUMENT NUMBER: 118:244465  
 TITLE: Silver halide photographic light-sensitive material  
 INVENTOR(S): Matsushita, Tetunori  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 74 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.             | KIND | DATE              | APPLICATION NO. | DATE     |
|------------------------|------|-------------------|-----------------|----------|
| EP 508432              | A1   | 19921014          | EP 1992-106180  | 19920409 |
| EP 508432              | B1   | 19980325          |                 |          |
| R: DE, FR, GB, NL      |      |                   |                 |          |
| JP 04311952            | A2   | 19921104          | JP 1991-103584  | 19910410 |
| US 5266453             | A    | 19931130          | US 1992-866517  | 19920410 |
| PRIORITY APPLN. INFO.: |      |                   | JP 1991-103584  | 19910410 |
| OTHER SOURCE(S):       |      | MARPAT 118:244465 |                 |          |
| GI                     |      |                   |                 |          |



AB Photog. material with improved safelight property contains in .gtoreq.1 hydrophilic colloidal layer .gtoreq.1 filter dye which is irreversibly bleached during processing step. The filter dye comprises I (R1, R2 = H, or a substitutable) group; n0, n1, n2 = 0-1; h = 1-2; R1, R2, R3 = may together form a hydrocarbon or heterocyclic ring; Y1 = CO, CO(NR4), CS, C(N+R5R6), SO, SO2, C(CR7R8), R6CN, or C6CCR9 in [(R1)n1 Y1] when n1 = 1 and in Y1(R3)n2 when n2 = 1 in which R4-R9 = H or a substitutable group, Y1 = CN, NO2 in [(R1)n1 Y1] when n1 = 0 and in Y1(R3)n2 when n2 = 0; x - divalent linkage; D = photog. dye residue; M = amphoteric group.

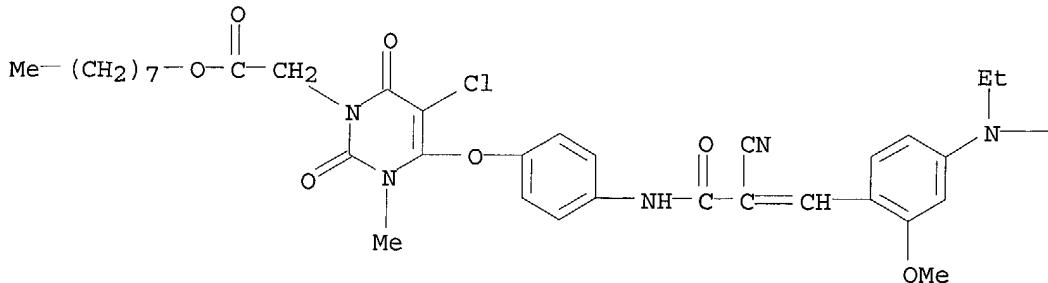
IT 146844-68-0  
 RL: USES (Uses)  
 (photog. material with improved safelight property contg. filter dye

of)

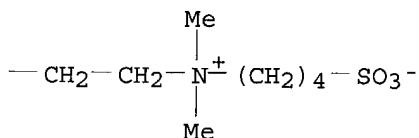
RN 146844-68-0 CAPLUS

CN 1-Butanaminium, N-[2-[[4-[3-[[4-[[5-chloro-1,2,3,6-tetrahydro-3-methyl-1-[2-(octyloxy)-2-oxoethyl]-2,6-dioxo-4-pyrimidinyl]oxy]phenyl]amino]-2-cyano-3-oxo-1-propenyl]-3-methoxyphenyl]ethylamino]ethyl]-N,N-dimethyl-4-sulfo-, inner salt (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L12 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1993:29821 CAPLUS

DOCUMENT NUMBER: 118:29821

TITLE: Photographic material containing quick bleachable dyes

INVENTOR(S): Kawashima, Yasuhiko; Yamauchi, Reiko; Kagawa, Nobuaki

PATENT ASSIGNEE(S): Konica Co., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 37 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

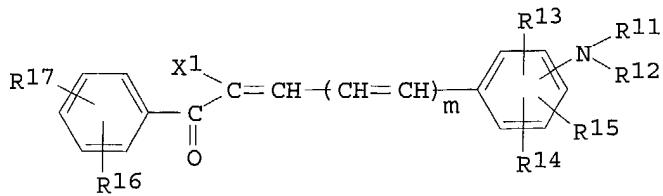
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

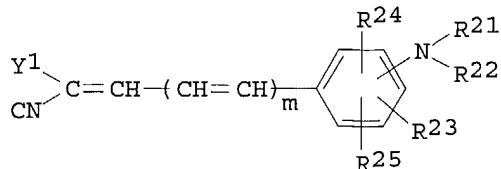
PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE     |
|------------------------|------|----------|-----------------|----------|
| JP 04116639            | A2   | 19920417 | JP 1990-237765  | 19900907 |
| PRIORITY APPLN. INFO.: |      |          | JP 1990-237765  | 19900907 |

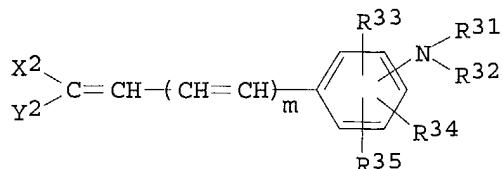
GI



I



II



III

AB The title photog. material contains a dispersed fine solid powder of a compd. selected from I, II and III [R1,2 = H, (cyclo)alkyl, alkenyl, aryl, heterocyclyl, acyl, sulfonyl; R1 and R2 may form a 5- or 6-membered ring; R3-5 = H, halo, alkyl, CO<sub>2</sub>H, alkoxy carbonyl, aryloxycarbonyl, amino, carbamoyl, sulfamoyl, NO<sub>2</sub>, CN, OH, alkoxy, SH, aryl, alkenyl; X1 = COR<sub>8</sub>, CONR<sub>8</sub>R<sub>9</sub>, CO<sub>2</sub>R<sub>8</sub>, SO<sub>2</sub>R<sub>8</sub>, SOR<sub>8</sub>, SO<sub>2</sub>NR<sub>8</sub>R<sub>9</sub>; R<sub>8,9</sub> = H, (cyclo)alkyl, aryl, heterocyclyl, alkenyl; m = 0-2; Y1 = CN, CONR<sub>8</sub>R<sub>9</sub>, CO<sub>2</sub>R<sub>8</sub>, SO<sub>2</sub>R<sub>8</sub>, SOR<sub>8</sub>, SO<sub>2</sub>NR<sub>8</sub>R<sub>9</sub>; X2, Y2 = COR<sub>8</sub>R<sub>9</sub>, CO<sub>2</sub>R<sub>8</sub>, SO<sub>2</sub>R<sub>8</sub>, SOR<sub>8</sub>, SO<sub>2</sub>NR<sub>8</sub>R<sub>9</sub>].

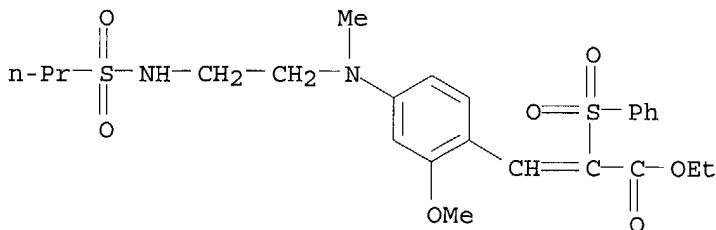
IT 144807-25-0

RL: USES (Uses)

(bleachable dye, photog. material contg.)

RN 144807-25-0 CAPLUS

CN 2-Propenoic acid, 3-[2-methoxy-4-[methyl[2-[(propylsulfonyl)amino]ethyl]amino]phenyl]-2-(phenylsulfonyl)-, ethyl ester (9CI) (CA INDEX NAME)



L12 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1991:682120 CAPLUS

DOCUMENT NUMBER: 115:282120

TITLE: Yellow colorants for sublimation thermal-transfer printing

INVENTOR(S): Chiba, Junji; Kato, Hiroyuki

PATENT ASSIGNEE(S): Sankyo Kagaku K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

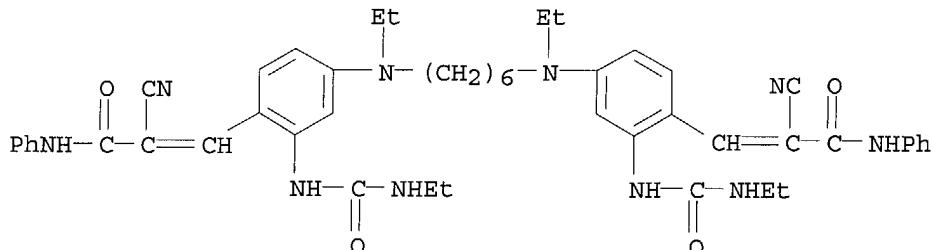
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

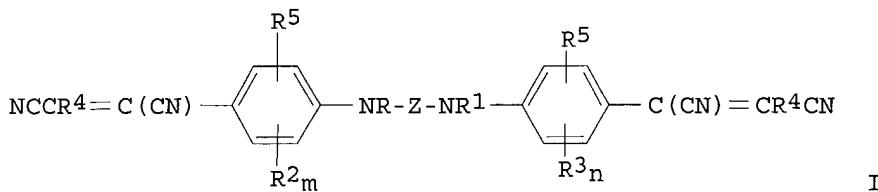
PATENT INFORMATION:

| PATENT NO.             | KIND   | DATE     | APPLICATION NO. | DATE     |
|------------------------|--|----------|-----------------|----------|
| JP 02292371            | A2   | 19901203 | JP 1989-112005  | 19890502 |
| PRIORITY APPLN. INFO.: |  |          | JP 1989-112005  | 19890502 |
| GI                     | For diagram(s), see printed CA Issue.  |          |                 |          |
| AB                     | The title colorants I [R1-2 = H, (un)substituted alkyl, cycloalkyl, aralkyl, aryl; R1-2 may be bonded with X to form 5- or 6-membered ring; R3-4 = H, halo, cyano, (un)substituted alkyl, cycloalkyl, alkoxy, aryl, aralkyl, acylamino, sulfonylamino, ureido, carbamoyl, sulfamoyl, acyl, amino; A1-2 = electron-withdrawing group; one of A1-2 may be aryl; Z = CH, N; Y = divalent group; X = H or group to from 5- or 6-membered ring with R1-2; m, n = 1, 2] are prep'd. Thus, condensation of PhNHBu and Br(CH <sub>2</sub> ) <sub>5</sub> Br in presence of Na <sub>2</sub> CO <sub>3</sub> and Vilsmeier formylation of the product gave N,N'-di-n-butyl-N,N'-bis(4-formylphenyl)-1,5-diaminopentane, which was then treated with CH <sub>2</sub> (CN) <sub>2</sub> to give 80% N,N'-di-n-butyl-N,N'-bis[4-(2,2-dicyanoethylene)phenyl]-1,5-diaminopentane (II). An ink contg. II 4, ethyl Cellosolve 8, MEK 44, and PhMe 44 parts was applied on a capacitor tissue paper and dried to obtain a thermal-transfer material, which gave high-d. image with bright yellow color. |          |                 |          |
| IT                     | 136029-48-6P   |          |                 |          |
| RL                     | PREP (Preparation)<br>(prepn. of, yellow dye, for sublimation thermal-transfer printing)   |          |                 |          |
| RN                     | 136029-48-6 CAPLUS   |          |                 |          |
| CN                     | 2-Propenamide, 3,3'-(1,6-hexanediylibis[(ethylimino)[2-[(ethylamino)carbonyl]amino]-4,1-phenylene]]bis[2-cyano-N-phenyl- (9CI)<br>(CA INDEX NAME)  |          |                 |          |



L12 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1991:618966 CAPLUS  
 DOCUMENT NUMBER: 115:218966  
 TITLE: Biscyanostyrene dyes for thermal-transfer recording  
 INVENTOR(S): Chiba, Junji; Kato, Hiroyuki  
 PATENT ASSIGNEE(S): Sankyo Chemical Industries, Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE     |
|------------------------|------|----------|-----------------|----------|
| JP 03086591            | A2   | 19910411 | JP 1989-223015  | 19890831 |
| PRIORITY APPLN. INFO.: |      |          | JP 1989-223015  | 19890831 |
| GI                     |      |          |                 |          |



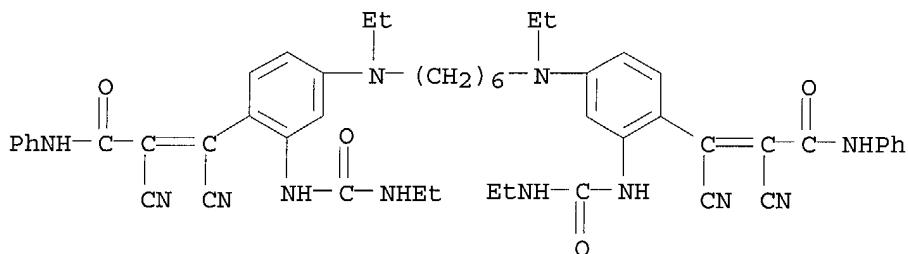
AB A dye for thermal-transfer recording has formula I [R, R1 = H, (substituted) alkyl, cycloalkyl, aralkyl, aryl, they may form a 5- or 6-membered ring together with R5, resp.; R2, R3 = H, halo, CN, (substituted) alkyl, cycloalkyl, alkoxy, aryl, aralkyl, acylamino, sulfonylamino, ureido, carbamoyl, sulfamoyl, acyl, amino; R4 = electron-attracting group; R5 = H, atom(s) required to form a 5-or 6-membered ring together with R or R1; Z = divalent group; m, n = 1,2]. A thermal-transfer sheet using I (R = R1 = Bu, R2 = R3 = R5 = H, R4 = CN, Z = (CH2)5) gave clear, high d. magenta images.

IT 136967-50-5

RL: USES (Uses)  
(thermal-transfer recording material using)

RN 136967-50-5 CAPLUS

CN 2-Propenamide, 3,3'-(1,6-hexanediylibis[(ethylimino)[2-[(ethylamino)carbonyl]amino]-4,1-phenylene]]bis[2,3-dicyano-N-phenyl-(9CI) (CA INDEX NAME)



=> d his

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L3 13 S L1 SSS FULL

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FILE 'REGISTRY' ENTERED AT 10:13:34 ON 02 DEC 2003

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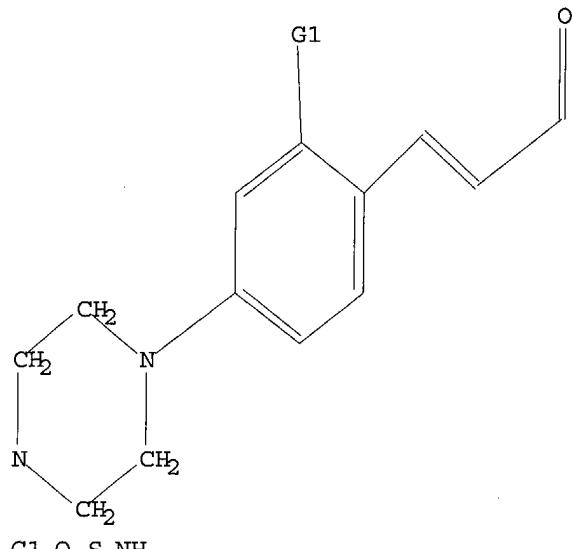
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d 116  
L16 HAS NO ANSWERS  
L16 STR



Structure attributes must be viewed using STN Express query preparation.

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BATCH **COMPLETE**

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FILE 'REGISTRY' ENTERED AT 10:22:21 ON 02 DEC 2003

L13                  13 DUP REM L8 (0 DUPLICATES REMOVED)

FILE 'CAPLUS, MEDLINE' ENTERED AT 10:22:40 ON 02 DEC 2003

L14                  5 DUP REM L12 (0 DUPLICATES REMOVED)  
L15                  0 S L12 NOT L4

FILE 'REGISTRY' ENTERED AT 10:31:22 ON 02 DEC 2003

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L17                  0 S L16 SSS SAM  
L18                  0 S L16 SSS FULL